

ABSTRACT

A method of manufacturing a cam shaft that prevents cracks during the joining of a cam lobe to a shaft, and improves the degree of freedom of design of the cam lobe is provided.

5        By a method of manufacturing a cam shaft that after an inner circumferential surface 13 of a cam lobe 1 is subjected to treatment for residual compressive stress addition treatment, the cam lobe 1 is joined to a shaft, above problem is solved. It is preferred that the residual compressive stress on the inner circumferential surface 13 of the cam lobe 1 is not less than 100 MPa. In addition, 10        an outer peripheral surface 14 of the cam lobe 1 can be also subjected to treatment for residual compressive stress addition treatment. As the treatment for residual compressive stress addition treatment, shot-peening treatment, induction hardening treatment, barrel 15        polishing treatment, carburizing and quenching treatment or carbonitriding treatment is performed.